CLAIMS

1. A revolving transmission having at least two revolving transmission elements, which may transmit a torque frictionally,

characterized in that a gap, preferably filled only with a liquid, is provided between the transmission elements at least during operation.

2. The transmission according to Claim 1,

characterized in that at least one of the revolving transmission elements and/or the coupling element is wetted with a liquid which comprises methyl siloxanes, dimethyl diphenyl siloxanes, and/or methyl phenyl siloxanes having phenyl groups, and/or alkyl-substituted γ-trifluoropropyl-substituted methyl siloxanes.

3. The transmission according to one of Claim 2,

characterized in that at least one of the revolving transmission elements and/or the coupling element is wetted with a liquid which comprises polydimethyl siloxanes, polydimethyl diphenyl siloxanes, and/or polymethyl phenyl siloxanes having phenyl groups, and/or which are alkyl-substituted γ-trifluoropropyl-substituted.

4. The transmission according to Claim 2 or 3,

characterized in that the liquid has components having organic substituents.

5. The transmission according to one of Claims 1 through 4,

characterized in that at least one of the revolving transmission elements and/or the coupling element is wetted with a liquid whose viscosity is stabilized in regard to temperature.

6. The transmission according to anyone of Claims 1 through 5,

characterized in that at least one of the revolving transmission elements and/or the coupling element is wetted with a liquid whose viscosity changes with a temperature-dependent viscosity gradient, which lies between the viscosity gradient (80) of mineral oils and the viscosity gradients (81) of dimethyl siloxanes.

7. The transmission according to one of Claims 1 through 6,

characterized in that at least one of the revolving transmission elements and/or the coupling element is wetted with a liquid whose compressibility changes with a temperature-dependent compressibility gradient, which lies between the compressibility gradient of mineral oils and the compressibility gradients of dimethyl siloxanes.

8. The transmission according to one of Claims 1 through 7,

characterized in that the running paths of at least one revolving transmission element have different surfaces.

9. The transmission according to Claim 8,

characterized in that grooves or projections of different widths and/or a varying surface texture and/or surface treatment are provided axially along at least one of the revolving transmission elements.

10. The transmission according to one of Claims 1 through 9,

characterized in that the coupling element has at least one running surface having a textured surface, particularly at least one running surface having grooves.

11. The transmission according to one of Claims 1 through 10,

characterized in that the coupling element, particularly in combination with a liquid which wets the running surfaces of the coupling element and/or the corresponding running surface of the corresponding transmission element and/or in combination with a single-sided holder of the coupling element, has at least one running surface having a cross-section deviating from a straight line, preferably having a concave and/or crowned cross-section.

12. The transmission according to one of Claims 1 through 11 having a continuously variable partial transmission,

characterized by two transmission paths connected in parallel, the continuously variable partial transmission being provided in a first of the two transmission paths.

13. The transmission according to Claim 12,

characterized in that a reverse gear, a first gear, and/or an overdrive is provided in the second of the two transmission paths.

14. The transmission according to Claim 12 or 13,

characterized in that at least one freewheel is provided between the two transmission paths.

15. The transmission according to one of Claims 12 through 14,

characterized in that the continuously variable partial transmission is positioned between two power dividers (41, 42), such as a differential gear part or a planetary gear part, at least one input of the continuously variable partial transmission being mechanically connected to at least one output of an input-side power divider and at least one output of the continuously variable partial transmission being mechanically connected to at least one input of an output-side power divider.

16. The transmission according to one of Claims 1 through 15,

characterized in that at least one forward gear and at least one reverse gear are implemented by a differential gear part (23), at least one assembly of the differential gear part able to be fixed alternately with the housing and/or with another assembly of the differential gear part.

17 . The transmission according to one of Claims 1 through 16,

characterized by at least two transmission paths (1, 2), which may be engaged alternately via a switching gear part (3).

18. The transmission according to Claim 17,

characterized in that the outputs of the two transmission paths are coupled in such a way that before the switching procedure from one to the other of the two transmission stages the speed of the second transmission path may be adapted by the continuously variable transmission to the speed of the first transmission path.

19. The transmission according to Claim 17 or 18,

characterized in that the second transmission path comprises a differential gear element (23).

20. The transmission according to one of Claims 17 through 19,

characterized by a third transmission path which may be engaged via a second switching gear part and/or via a freewheel.

21. The transmission according to one of Claims 17 through 20,

characterized in that the switching gear part (3) couples the continuously variable partial transmission (1) to a pump wheel (21) of a Trilok converter (20) and the second transmission stage (2) is coupled to a turbine wheel (22) of the Trilok converter (20).

22. A transmission having a continuously variable partial transmission according to one of Claims 1 through 21,

characterized by a coaxially positioned drive (53) and output (50).

23. The transmission according to Claim 22,

characterized in that a differential gear part (59), which is driven by an output (56) of the continuous transmission, is provided in the coaxial output (50).

24. The transmission according to one of Claims 1 through 23,

characterized by an electric motor drive for a continuously variable partial transmission.

25. The transmission according to one of Claims 1 through 24,

characterized in that a disengagement point, such as a startup clutch and/or a converter (Trilok converter), a friction disk arrangement, a hydraulic clutch, or a synchronization is provided on the output side.

26. The transmission according to one of Claims 1 through 25,

characterized in that a disengagement point, such as a startup clutch and/or a converter (Trilok converter 20), a friction disk arrangement, a hydraulic clutch, or a synchronization (3) is provided on the drive side.

27. The transmission according to one of Claims 1 through 26,

characterized in that two partial transmissions (1, 2; 101, 102) are each brought together and/or engage with

their output (26, 126; 29; 129) at a drive (27; 127) of the following transmission path (15, 115).

28. The transmission according to Claim 27,

characterized in that the drive (127) of the following transmission path is the main differential (115) of a motor vehicle.

29. The transmission according to Claims 27 or 28,

characterized in that each of the two partial transmissions (1, 2; 101, 102) may be engaged and/or disengaged.

30. The transmission according to one of Claims 1 through 29, in which at least two transmission elements revolving on different axes are braced against one another via a pressure device,

characterized in that a clutch element (134) is provided, through which the two transmission elements (104, 105) may alternately be disconnected from a third transmission element (115, 129) by opening a clutch element (134) or connected to the third transmission element (115, 129) by closing the clutch element (134) and which is closed by the pressure applied by the pressure device (108).

31. The transmission according to Claim 30,

characterized in that the clutch element (134) comprises a cone clutch (156, 157).

32. The transmission according to one of the preceding claims, having a reverse gear (202) provided behind

the output (204) in series with the continuously variable transmission (201).

33. The transmission according to Claim 32,

characterized in that the reverse gear comprises an epicyclic gear having at least one revolving gear mount (225, 226), which mounts at least one transmission element (215, 216) of the epicyclic gear and may be fixed alternately with a fixed mount (227, 232) and/or a revolving transmission element (209, 217; 212, 218).

34. The transmission according to Claim 32 or 33,

characterized in that the reverse gear (202) comprises a planetary gear (210, 211) having planet wheels (215, 216), sun wheel (209, 212), and external wheel (217, 218), of which a first transmission element (209, 212) is mechanically connected to the output (207) of the conical friction ring transmission (201) and a second transmission element (217, 218) is mechanically connected to the output (220, 223) of the overall arrangement made of transmission (201) and reverse gear (202), while the third transmission element (215, 216) may be fixed in regard to at least one degree of freedom in relation to a mount or housing (227, 232).

35. The transmission according to Claim 34,

characterized in that the third transmission element is the planet wheels.

36. The transmission according to Claim 34 or 35,

characterized in that the first transmission element is driven by a pinion (207) which revolves with the output cone.

37. The transmission according to one of Claims 34 through 36,

characterized in that the second transmission element revolves connected to the revolving mount (219) of the differential (220).

38. The transmission according to one of Claims 34 through 37,

characterized in that two of the transmission elements, preferably the first and second transmission elements, may be fixed with one another.

39. The transmission according to one of Claims 33 through 39,

characterized in that a clutch (229), a slanted brake (227, 228), and/or a synchronization (230) is used for fixing.

40. The transmission according to one of the preceding claims,

characterized in that two continuously variable partial transmissions (306, 307) are provided, which are switched at an input and/or output element (309, 310) via a summation gear (308).

41. The transmission according to Claim 40,

characterized in that the two continuously variable partial transmissions (306, 307) have a shared

transmission element (301) on the side facing away from the summation gear (308).

42. The transmission according to Claim 40 or 41,

characterized in that the two continuously variable partial transmissions (306, 307) each have an input shaft axis (349) and an output shaft axis (348, 350), positioned essentially parallel thereto in a partial transmission plane, the partial transmission planes being positioned in parallel.

43. The transmission according to Claim 42,

characterized in that the two partial transmission planes are identical.

44. The transmission according to one of Claims 40 through 43,

characterized in that the two partial transmissions have a shared input shaft (301, 349) or a shared output shaft (309).

45. The transmission according to one of Claims 40 through 44,

characterized in that a further adjustable partial transmission (321, 339, 340, 341), particularly a switching gear and/or a reverse gear, is provided between at least one of the continuously variable partial transmissions (306, 307) and the summation gear (308).

46. The transmission according to one of Claims 40 through 45,

characterized in that at least one of the continuously variable transmissions (306, 307) may be bypassed (321, 339).

47. The transmission according to one of Claims 40 through 46,

characterized in that the summation gear (308) has at least one fixable transmission element (312, 320).